

**CLAIMS:**

1. A juicer for fruit and vegetables, comprising:  
an electric motor having a driven output shaft;  
5 a shredder mounted for rotation about its axis to the output shaft of the motor;  
a feed tube to deliver pieces to be juiced to the shredder for juicing;  
where the feed tube has an inner diameter of more than 75mm, and three, or  
more, inwardly directed formations are arranged to constrict the interior of the feed  
tube.
- 10 2. A juicer for fruit and vegetables according to claim 1, wherein the inner  
diameter of the feed tube is 85mm or more.
3. A juicer for fruit and vegetables according to claim 1 or 2, wherein the inwardly  
15 directed formations are arranged about a collar at the top of the feed tube.
4. A juicer for fruit and vegetables according to claim 1 or 2, wherein the inwardly  
directed formations comprise ribs running down the collar.
- 20 5. A juicer for fruit and vegetables according to claim 1 or 2, wherein the inwardly  
directed formations are integrated into the walls of the feed tube.
6. A juicer for fruit and vegetables according to claim 1, 2 or 5, wherein the  
inwardly directed formations comprise ribs running down the length of the walls of the  
25 feed tube.
7. A juicer for fruit and vegetables according to claim 6, wherein the free edge of  
the ribs down the length of the feed tube is sharp to provide a cutting blade.
- 30 8. A juicer for fruit and vegetables according to claim 7, wherein the ribs increase  
in height running down the length of the feed tube.
9. A juicer for fruit and vegetables according to any one of the preceding claims,  
wherein the formations are nine equispaced inwardly directed ribs.

10. A juicer for fruit and vegetables according to any one of the preceding claims, wherein each formation is 5.5mm high or more.
11. A juicer for fruit and vegetables according to any one of the preceding claims,  
5 wherein the shredder has toothed sidewalls with axial symmetry, and is frusto-conical in shape.
12. A juicer for fruit and vegetables according to claim 11, wherein the shredder is mounted with the narrow end of the frusto-conical shredder to the driven output shaft  
10 of the motor and oriented with the axis of the frusto-conical shredder offset from vertical.
13. A juicer for fruit and vegetables according to claim 11 or 12, wherein the shredder is mounted on bearings arranged around the wide end of the frusto-conical  
15 shredder.
14. A juicer for fruit and vegetables according to any one of claims 11, 12 or 13, wherein a frusto-conical sieve extends from the wide end of the frusto-conical shredder.
- 20 15. A juicer for fruit and vegetables according to any one of claims 11 to 14, wherein the lower end of the feed tube is positioned adjacent the toothed sidewall of the shredder.
16. A juicer for fruit and vegetables according to claim 14, wherein the sidewalls of  
25 the sieve are offset to the sidewalls of the shredder.
17. A juicer for fruit and vegetables according to claim 14 or 16, wherein a lid assembly encloses the frusto-conical sieve, where the lid assembly provides a spout extending downwardly from sieve to dispense juice into a beaker and a pulp receiving  
30 chamber offset to one side of the sieve.
18. A juicer for fruit and vegetables according to claim 17, wherein the configuration of the offset of the axis of the shredder and the offset between the sidewalls of the shredder and sieve together with the rotating action of the shredder  
35 throws the pulp and juice up out of the shredder into the chamber and spout respectively.

**19. A juicer for fruit and vegetables according to claim 17 or 18, wherein fans blades are provided around the top edge of the sieve to clear pulp from accumulating there and to move it into the pulp receiving chamber.**